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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,520	09/19/2006	Dwight P. Williams	50262	1195

7590
Sue Z. Shaper PC
1800 WEST LOOP SOUTH
SUITE 1450
Houston, TX 77027

EXAMINER

KIM, CHRISTOPHER S

ART UNIT	PAPER NUMBER
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3752

MAIL DATE	DELIVERY MODE
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08/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/568,520

Applicant(s)

WILLIAMS, DWIGHT P.

Examiner

Christopher S. Kim

Art Unit

3752

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) 4, 13 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 14-18, 20-30 and 32-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/23/06; 2/14/07; 6/09/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, Species B in the reply filed on May 14, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 4, 13, 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention/species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 14, 2009.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "at least three said foam conduits around the tank and at least three said dry chemical conduits spaced around the tank" recited in claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-3, 8-12, 14-18, 20-30, 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "difficult" in claim 1 is a relative term which renders the claim indefinite. The term "difficult" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is uncertain what type of fire is limited by the claim.

Regarding claim 1, the preamble recites a "method" having and intended use "for treating a difficult to extinguish flammable liquid fire associated with a tank having a roof and a substantially enclosed space above liquid in the tank and below the roof." The body of the claim includes recitations directed to "a surface of the liquid within the tank" and "a space between the roof and said blanket." The preamble is directed to a subcombination of a method but the body of the claim is directed to a combination of a method, tank and liquid.

Claim 1 recites the limitation "a space" in line 6. It appears to be a double inclusion of the "substantially enclosed space" recited in line 2.

In claims 2 and 3, the recitation "NFPA regulated" renders the claims indefinite.

Claim 2 recites "an NFPA regulated foam/film blanket" in line 2. It appears to be a double inclusion of the "foam/film blanket" recited in claim 1, line 4.

Claim 3 recites the limitation "the last 10 minutes" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

The term "difficult" in claim 5 is a relative term which renders the claim indefinite. The term "difficult" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is uncertain what type of fire is limited by the claim.

In claims 8 and 9, the recitation "NFPA recommended" renders the claims indefinite.

Regarding claim 5, the preamble recites a "fixed foam/dry chemical system" having and intended use "for an industrial size tank with a roof having space above a difficult to extinguish flammable liquid in the tank and below the roof." The body of the claim includes recitations directed to "the tank" and "the space under the roof the tank." The preamble is directed to a subcombination of a system but the body of the claim is directed to a combination of a system and tank.

The claims are replete with indefiniteness. Above is only an exemplary listing. Applicant is required to review and amend all of the claims in their entirety for full compliance with 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 5, 7, 25-30, 32-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharma et al. (5,573,068).

Sharma discloses a method comprising:

establishing a foam blanket over at least 90% (column 1, line 22, column 4, lines 7 and 44-46: uniform discharge for blanketing the flammable liquid);
discharging dry powder (abstract, lines 2-3, column 4, lines 47-50).

Sharma discloses a system comprising:

at least one foam conduit 6 (column 4, lines 14-20) in valved fluid communication (through valve 5) with an interior of the tank 7 through at least one opening (entry opening in tank 7 for conduit 6);

at least one dry chemical conduit 6 (column 4, lines 4-20) in valved fluid communication (through valve 5) with the space under the roof of the tank through said at least one opening (entry opening in tank 7 for conduit 6);

a nozzle 4.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 5-12, 14, 16-18, 20-22, 24-30, 32-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Boyd (1,917,694) in view of Williams et al. (5,913,366) or Foden et al. (2,996,119).

Boyd discloses a system comprising a tank 1 having roof 3, vent 13, nozzle 8.

Boyd differs from what is being claimed in the dry powder. Boyd discloses using foam.

Williams discloses, in claims 8 and 9, applying foam then dry powder.

Foden discloses, in column 3, lines 1-10 and column 4, lines 21-31, applying foam then dry powder.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided foam then dry powder in the device of Boyd as taught by Williams or Foden to complete the extinguishing (Foden, column 3, lines 5-6).

10. Claims 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyd (1,917,694) in view of Williams et al. (5,913,366) or Foden et al. (2,996,119) as applied to claims 8 and 17 above, and further in view of Baum (3,687,329).

Boyd in view of Williams or Foden discloses the limitations of the claimed invention except the floater.

Baum discloses a floater 8.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided a floater in the device of Boyd in view of Williams or Foden as taught by Baum for a protective blanket (Baum, column 2, line 67).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571) 272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher S. Kim/
Primary Examiner, Art Unit 3752

CK